REMARKS

Reconsideration of the rejections made in the office action dated July 28, 2005 is respectfully requested in view of the above amendments and the following remarks. Claims 1-38 have been canceled, claims 39-45 remain in the application and new claims 46-47 have been added to the application.

Claims 39-43 and 45 were rejected under 35 USC §112, first paragraph, as lacking an adequate written description for the limitation "G protein mediated extracellular signal transduction pathway". This limitation is supported by the disclosure on page 2, lines 5-22 of the present application. In view of this disclosure, applicants request that this rejection be withdrawn.

Claim 44 was rejected under 35 USC §112, second paragraph as indefinite. Claim 44 has been amended to clarify the language found indefinite. In view of this amendment, applicants request that this rejection be withdrawn.

Claims 39, 40, 42 and 43 were rejected under 35 USC §102(a) over Dong et al. Enclosed is a diagram which shows the signal transduction pathway starting from a dysfunction of G-protein signal transduction and resulting in a receptor tyrosine kinase activation. In the presently claimed method, the modulator binds directly to the growth factor receptor. In contrast to the present invention, Dong uses batimastat which inhibits the metallo-proteinase. Thus, the present invention inhibits receptor tyrosine kinase transactivation by a different mechanism. For example, the recognition sequence for a metalloproteinase may be masked by binding of the modulator in the present method or the binding of the modulator may inhibit the binding of the growth factor to the receptor. In

Dong, the enzymatic activity of the metalloproteinase is inhibited using batimastat. Though Dong's method can interrupt the whole signal cascade, the present invention interrupts the signal cascade in a different way. In the present invention a compound binds to the growth factor precursor inhibiting processing of the precursor and interrupting the signal cascade. Thus, the present inventors have shown for the first time that modulators which act on a growth factor precursor to inhibit the activation of the extracellular domain of a growth factor receptor are suitable for the treatment of disorders, in particular of cancers, which are induced by G- protein mediated signal transduction. In contrast to the present invention, Dong discloses only that the inhibitory effect of batimastat on metastasis is due to interference with autocrine EGFR signaling. Thus, Dong does not suggest or disclose a method for identifying and providing modulators according to the present invention. In view of the above amendments and arguments, applicants request that this rejection be withdrawn.

Claim 41 was rejected under 35 USC §103(a) as unpatentable over Dong in view of Miyoshi. Miyoshi was cited for the disclosure of a cell line which produces proHB-EGF and contains EGFR. Miyoshi does not suggest or disclose contacting the cell with a compound which binds to a growth factor precursor in a G protein mediated extracellular signal transduction pathway wherein said G protein mediated extracellular signal transduction pathway includes cleavage of a growth factor receptor, or a step of stimulating the G protein/GPCR initiated signal transduction pathway as required in the first step of the present claims followed by a second step of contacting a cell with a compound affecting a G

protein mediated extracellular signal transduction pathway and thus does not cure the above discussed deficiencies in Dong. In view of the above discussion and amendments, applicants request that this rejection be withdrawn.

Applicants respectfully submit that claims 39-47 are now in condition for allowance. If it is believed that the application is not in condition for allowance, it is respectfully requested that the undersigned attorney be contacted at the telephone number below.

In the event this paper is not considered to be timely filed, the Applicant respectfully petitions for an appropriate extension of time. Any fee for such an extension together with any additional fees that may be due with respect to this paper, may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

By 

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